Federal Aviation Administration (FAA) Fairbanks Flight Standards District Office (FSDO)

6450 Airport Way, Suite 2, Fairbanks, Alaska 99709, (907) 474-0276, 1-800-294-5119, fax (907) 479-9650 <u>www.alaska.faa.gov/faifsdo</u>

AIRWORTHINESS NEWSLETTER

For Inspection Authorization Holders, A&Ps and Repairmen

Clint Wease–Manager James H. Tupper–Airworthiness Supervisor

August 2005

Looks like our hopes for a smoke-free summer did not come to pass, but we did much better than last year. Just as we started to enjoy lower avgas prices (thanks, Jon), we got Hurricane Katrina! Oh, well.

There have been many changes in the local aviation industry lately. When things change, we have to be even more vigilant that we are keeping an eye on the safety of our maintenance activities. It doesn't matter if the pressure is economic (lower revenue), operational (busy fall flying season), or personal (job worries or other distractions), now is the time to double check that you have done the job per appropriate guidance, adequately, and safely. Ask for help if you need it, and help out your buddy - double check each other, especially when you are feeling rushed or pressured into getting the job done.

There is change afoot within the FAA as well: we're moving! Your friendly local FSDO has happily occupied space in the 1950's-era section of Fairbanks International Airport's terminal for several years, but the space has been slated for replacement. Sooner or later, we would need a new home, and we've chosen sooner. About the time we should be sending out the February 2006 Airworthiness Newsletter, we could be in the process of moving. Expect more details then. For now, we know we'll be just down the street in a new facility between the DHL building and the airport time and temperature sign. Please bear with us as we complete the move. We will strive to minimize the inevitable disruption to our services.

On the national level, the FAA Safety Program is changing to the FAA Safety Team (FAASTeam). As you may know, this Newsletter has long been the project of the Airworthiness Safety Program Manager (SPM), who works for the FSDO Manager. As part of the national change, a new Regional FAASTeam Manager (RFM) was selected this month: Jim Wilkinson of Anchorage. The RFM replaces the former Regional Safety Program Manager (RSPM). Some time in the next several months, the RFM will be selecting new FAASTeam Managers (FMs) who will replace the SPMs. The new FAASTeam will be a regional field office separate from the FSDOs. Fairbanks may end up with some, none, or all of the new FMs. So, we are not sure what will happen to this Newsletter. We do know that Jim Tupper and David Karalunas will do everything they can to make sure it continues.

Your current Airworthiness SPM had many plans that he expected to accomplish in the last two years. However, SPMs have been increasingly tasked to work on regional and national goals to support the FAA Administrator's Flight Plan and to reduce accidents in Alaska. Fortunately for us mechanics, the majority of accidents are operational, not maintenance-related. But that also puts the FAA's focus on operations issues. In this issue of the Newsletter, we are going to talk about recent accidents, and fatalities, that could have been prevented with better maintenance practices. So pay attention, see if you can learn something here to improve your own practices, and keep up the great job that you all do to minimize maintenance-related accidents and incidents in the far north of Alaska!

Recent Accidents

TapRooT® Investigations: The FAA Alaskan Region is now conducting in-depth root-cause investigations on all fatal accidents using the commercial TapRooT® analysis tool. This is separate from the normal accident investigation or related enforcement case(s), if any. Historically, investigations stopped at "maintenance error," for example. Today we are asking why the error was made - was it due to fatigue, lack of training or data, violation of the rules, or a decision error? If it was lack of data, was the data available but not used, or was the appropriate and followed data inadequate for the job? Were the FAA testing/training standards or surveillance adequate? The point is that we are looking for problems in the whole aviation safety system, not just with the first person linked to the accident scene. By addressing systemic problems, we can ideally reduce or eliminate whole categories of accidents.

Fatal Accident, Fairbanks, Alaska: A recent accident raised a number of operational and maintenance issues. The TapRooT® team is still working on it, but there are maintenance items worth sharing now.

Two occupants were in the aircraft, which crashed just after takeoff and a loss of power. Both wore shoulder harnesses that appear to have been installed around 10 years ago. The shoulder straps connected to the anchor strap in a "T" lap joint. There were no data tags or identification on the harnesses or in the records, and no FAA approval for the installation. They were exposed to additional ultraviolet (UV) radiation via the greenhouse or skylight windows. The stitching on the pilot's shoulder-to-anchor strap connection failed, while the passenger harness held together. The passenger survived and the pilot died.

Both the "T" configuration (as compared to an inverted "Y" connection) and the installation angles of the harnesses were contrary to guidance in AC 43.13-2A Chapter 9. Material certification standards exist for webbing and stitching exposure to UV, but little if any inspection guidance (ICA) exists for the mechanic. Without TSO or other approval traceability, it is unknown if the installed harnesses met UV exposure certification standards. As a side note, we've learned that Department of Interior's Office of Aircraft Services (OAS) requires harness replacement at 5 years. Make sure the harnesses (and lap belts) you inspect are properly designed, marked, installed, approved, and in serviceable condition, and consider undetectable UV damage as a reason to replace (faded?) but visually acceptable parts. Lives do depend on them.

On the same aircraft, there was a history of engine failure or power loss right after takeoff. There were two documented events resulting in emergency landings. After the first event, the owner decided it was carburetor ice. After another event, the owner and mechanic decided to replace a magneto. At least once, the carburetor was opened up and inspected. Our review found that the problems began *after* a new replacement carburetor was installed. We also found that the tang on the float assembly that retracts the float valve to fill the float bowl was bent in a manner that may have allowed the float to reach the bottom of the bowl without pulling the valve off the seat. Although the mechanic who last opened the carburetor didn't have the most current data, there are no current inspection criteria for the position of the tang, or to check the *opening* of the valve. Bench testing of the carburetor in a simulated full-power climb attitude has yet to be done.

The last issue on the above accident regards maintenance records. Review 14 CFR 43.9 and 43.11. Make sure that for every maintenance task performed, you have a signature for the work performed, a description of the work (or appropriate reference), and the name of the person who performed it, if other than the person signing it off. This is such basic stuff that we should always be able to get it right. And don't forget about the operational checks and log entries per 91.407. Let's help the owner get it right, too.

Fatal Accident, Denver, Colorado: A Cessna 421 crashed December 17 killing three commercial pilots, the NTSB reported recently. Mechanical problems with the left engine's fuel control that could have restricted fuel flow were probably there before the crash, the engine's manufacturer told the NTSB. The plane had taken off from the Fort Collins-Loveland airport that morning and was on its return flight when it crashed. The report said witnesses told investigators the pilot had trouble starting the engines before both flights. One witness at Centennial told investigators she saw a puff of black smoke while the plane was taxiing to the runway. A father told investigators his daughter (one of the fatalities) had called him from Centennial and told him the plane was having engine or fuel problems, and that something had been "hooked up backward" during a recent repair, the report said. It said repair technicians in Fort Collins said they recently had replaced some fuel-control equipment for the left engine. They said it was a simple repair and that it was impossible for anything to be hooked up backward, the report said.

The point here, as with the Fairbanks fatal, is not to let aircraft with known issues continue to fly. We need to make "Fly it and watch it" a thing of the past. And no more limping the aircraft back to the maintenance base, either. Fix it where it breaks, or fly it on a ferry permit, without passengers, after a proper safety determination has been made. Make sure you troubleshoot adequately, understand the discrepant system, fix what you think is wrong, and then verify that it is fixed before returning the aircraft to passenger service. This may require you to fly with the pilot and make that determination. For intermittent problems, it may require duplicating the problem scenario, and multiple tests or flights. And it may require asking an expert (like the manufacturer, tech rep, or your Inspector) for help.

In-flight fire, DeHavilland Otter, Southeast Alaska: Investigation found a pinhole in the size -4 rigid tubing that provides fuel pressure to the cockpit gauge. The tubing runs from a bulkhead fitting on the left side of the firewall, along the back of the firewall to a former and second bulkhead fitting near the center of the aircraft, then a hose runs to the gauge. The pinhole appeared to have been caused by corrosion originating from inside the line. The outside of the line looked good except for the pinhole. The fuselage sat for years before the aircraft was rebuilt. The portion of the line where the hole was located is mounted horizontally, allowing for moisture to pool inside the line. The line was original airframe equipment. This problem could exist in any Otter, or in any aircraft with a long period of disuse. A related issue is that of an orifice fitting installed where the pressure is taken from the engine. This aircraft had an orifice fitting in the fuel line but not in the oil pressure line. You might want to check your aircraft data to see if orifice fittings are required, and make sure they are installed. This Otter pilot was able to land while sustaining burns to his hands. Had the fuel pressure orifice fitting been missing, this would have been a fatal accident.

Airworthy Parts and Suspected Unapproved Parts

We've seen some problems lately with unlabeled parts, and with parts approved on a specific model aircraft that were installed in other model aircraft without approval. We've been shown a lap belt in which the steel attachment plate that bolts to the airframe has been cut to install new webbing, then welded shut. These are all unairworthy items. Review the parts marking requirements in 14 CFR 45.15. Are the parts you buy, sell, or install properly documented, and applicable to the installation? 14 CFR 43.13(b) and 43.15(a)(1) make this determination your responsibility when performing maintenance and inspections, respectively. It takes verifiable data to show compliance with these regulations. If the part doesn't come with that data (like OEM traceability, a TSO tag, or PMA mark and eligibility list), then you have to come up with it yourself and/or seek approval (Field Approval, DER data, etc.). On shoulder harnesses in particular, we recommend that you only install shoulder harnesses that meet TSO C114, and are so labeled. When inspecting aircraft, you must "[p]erform the inspection so as to determine whether the aircraft, or portion(s) thereof under inspection, meets all applicable airworthiness requirements" [14 CFR 43.15(a)(1)]. When you find a part that should be labeled but isn't, and you can't verify that it was approved as part of the airplane or properly installed by other subsequent means, replacement may be the option. Please call if vou have auestions. only safe Check www.faa.gov/aircraft/safety/programs/sups for more information on SUPS.

IA Facilities, Equipment, and Data Issues

FAA headquarters has asked for increased surveillance of IAs in the coming year. We don't want you guys to get in trouble, so we are going to tell you up front what the expectations are. Read 14 CFR 65.91 through 65.95. There are two foot-stompers in there: 65.92(b)(3) and 65.93(a).

Your IA is only *effective* if you have all the required stuff necessary for *issuance*. If your data subscription is expired or unavailable (broken computer or fiche reader), then you don't have an effective IA. Only an IA can do an annual inspection. **If you don't have current data readily available while you are inspecting, you can't even perform the inspection much less sign it off. This is also true for signing Block 7 on Form 337. Don't get caught by this - keep your data current, tools calibrated, phone number and place of business current with us. Have the data you need with you when at the aircraft.**

At renewal, you must *present evidence at our office* that you still meet 65.91(c)(1) through (4). Up until now, your signature on the renewal application has satisfied that requirement. We don't know if it will in the future. We don't want you all to show up with a truckload of stuff in March, so expect to see your assigned Inspector visit you before then to verify that you still have what it takes for issuance of your IA. See FAA-G-8082-11A, Inspection Authorization Knowledge Test Guide, or your older copy of AC 65-19, Inspection Authorization Study Guide, for what the Inspector might ask to see. The current Guide is available at: http://av-info.faa.gov/data/knowledgetestguide/faa-g-8082-11a.pdf.

ADs on All Experimental Aircraft and Special Light-Sport Aircraft

In February, we sent a briefing paper to FAA headquarters on this, and we just received the response. Despite the confusion around this issue, FAA Flight Standards policy and guidance has been consistent for decades: ADs apply if the item called out in the AD is installed. The Experimental Aircraft Association and other groups have argued that they don't, based on language in Part 43 and one document published by FAA Aircraft Certification in 1997 that dealt with gliders. 14 CFR 43.1(b) states "This part does not apply to any aircraft for which the FAA has issued an experimental certificate, unless the FAA has previously issued a different kind of airworthiness certificate for that aircraft." So the performance rules or other provisions of Part 43 may not apply to the aircraft in general. AD compliance, however, is required separately by Parts 39 and 91. It is true that an AD would never be issued on an experimental aircraft, because there is no type design for the aircraft. But ADs can be issued on type-certificated, STCed, PMAed, or otherwise approved aircraft engines, propellers, appliances, and component parts, which may be installed on an experimental aircraft or Light-Sport Aircraft, and they do apply. FAA headquarters specifically said that some of the relief from ADs discussed in the Light Sport Aircraft Final Rule's preamble did not appear in the rule itself. Therefore, if you are asked to perform an inspection on an experimental aircraft or Light-Sport Aircraft, be sure to look for ADs on any installed equipment. FAA headquarters says there are some issues to clarify between Part 39 and 43, after which they can provide better public guidance, but that current priorities have not allowed the subject to be addressed. Meanwhile, ADs apply, and the performance rules of 43.13 apply to all certificated products. Other documents addressing the subject are excerpted below.

From an FAA legal opinion on 6/3/2003: "What is the regulatory basis for requiring compliance with Airworthiness Directives on experimental amateur built aircraft? Answer: 14 CFR §39.7 provides that anyone who operates the product that does not meet the requirements of an applicable Airworthiness Directive is in violation of that section. 14 CFR 91.403(a) provides that the owner of an aircraft is primarily responsible for maintaining that aircraft in airworthy condition, including compliance with Part 39. ADs apply to the make and model product described in the applicability statement of the Airworthiness Directive, regardless of the classification or category of the aircraft's airworthiness certificate."

From the Final Rule for the last change to 14 CFR Part 39 [Docket No. FAA-2000-8460, Amendment No. 39-9474, published July 22, 2002 and effective August 21, 2002]:

"ADs apply to a specific product, even if the product has been changed. We cannot tell whether a change satisfies the safety concern until the operator demonstrates that to us. If the operator demonstrated to FAA that the change satisfied the safety concern, we may approve the change as an alternative method of compliance."

"Presumably, the purpose of an operator's alternative method of compliance would be to avoid having to undertake the actions required by an AD. If the operator of a product that has been modified, altered, or repaired can show that the change makes the aircraft safe, FAA will approve the new configuration as an alternative method of compliance and the operator would not have to take the actions specified in the AD. This is not a new requirement. All products identified in the applicability provision of an AD have always been subject to the directive. Originally, we began including this note in ADs because some operators had taken the legally incorrect position that, because they had changed their aircraft, they did not have to comply."

From 14 CFR 39.1, Definition of Airworthiness Directives:

"FAA's airworthiness directives are legally enforceable rules that apply to the following products: aircraft, aircraft engines, propellers, and appliances."

From Advisory Circular (AC) 39-7C, Airworthiness Directives, dated 11/16/1995:

- "8. APPLICABILITY OF AD's. Each AD contains an applicability statement specifying the product (aircraft, aircraft engine, propeller, or appliance) to which it applies. Some aircraft owners and operators mistakenly assume that AD's do not apply to aircraft with other than standard airworthiness certificates, i.e., special airworthiness certificates in the restricted, limited, or experimental category. Unless specifically stated, AD's apply to the make and model set forth in the applicability statement regardless of the classification or category of the airworthiness certificate issued for the aircraft."
- "e. Every AD applies to each product identified in the applicability statement, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of the AD. For products that have been modified, altered, or repaired so that performance of the requirements of the AD is affected, the owner/operator must use the authority provided in the alternative methods of compliance provision of the AD (see paragraph 12) to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition; or, different actions necessary to address the unsafe condition described in the AD. In no case, does the presence of any alteration, modification, or repair remove any product from the applicability of this AD."
- **"9.** AD COMPLIANCE. AD's are regulations issued under part 39. Therefore, no person may operate a product to which an AD applies, except in accordance with the requirements of that AD."
- "13. RESPONSIBILITY FOR AD COMPLIANCE AND RECORDATION. The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including compliance with AD's.
- **a.** This responsibility may be met by ensuring that properly certificated and appropriately rated maintenance person(s) accomplish the requirements of the AD and properly record this action in the appropriate maintenance records. This action must be accomplished within the compliance time specified in the AD or the aircraft may not be operated."

Miscellaneous Maintenance Information

The FAA reorganized its website, so here's how to get to ACs now: Start at www.faa.gov; click on tab "Regulations & Policies"; click on "Advisory Circulars"; type 145-10 or whatever in the search block.

Airworthiness Newsletters are available on-line. Recent newsletters, and other mechanic resources, are available through the FSDO website. Check it out at: www.alaska.faa.gov/faifsdo/mechanic.htm

Internet SDR Website: You can submit Service Difficulty Reports (SDR's) and search the database at http://av-info.faa.gov/isdr. If you submit through this site as a company, coordinate with your assigned Inspector. If you submit as an individual mechanic, please send a copy to the FSDO so we can stay on top of local issues. We can identify trends much faster that way, then get the word out to other operators.

Repair Stations: The long-awaited AC 145-10, Repair Station Training Program, is now available. The date for compliance per 14 CFR 146.163 now starts April 6, 2006. This AC has good information on maintenance training in general, and lists some good resources in the last appendix - check it out!

Turnbuckles: You should have received a package in the mail recently from our office with photos of cracked MS-style turnbuckle barrels. Be sure to look closely at this during inspections. We've posted the mailed info at www.alaska.faa.gov/faifsdo/mechanic.htm. Scroll down the page to "Turnbuckles."

Maintenance Scholarship Available: Check out the new maintenance education and career development scholarship from NBAA at: http://web.nbaa.org/public/news/pr/2005/20050523-031.php

ELT Frequency Changes: FAA has issued a NOTAM announcing discontinuance of 121.5 and 243.0 frequency monitoring effective 1 FEB 2009. There is no requirement to upgrade to 406 MHz, and 121.5/243.0 units will still satisfy the ELT regulatory requirement. Local searches will still be able to track the signal, the old ones just won't be detected by the COPAS-SARSAT and processed to the worldwide Rescue Coordination Centers after 1 FEB 2009. So you might want to advise your owners or customers that the smart money may go to an upgrade instead of new batteries or a 121.5/243.0 replacement unit. Upgrade is highly recommended if operating in mountainous or remote terrain where signals will be hard to detect with ground or airborne receivers. You can refer owners to more ELT, PLB (personal locator beacon) and search and rescue information at www.sarsat.noaa.gov.

We Are Here to Support YOU! If you need information, would like to have us give a presentation where you work, help with training program issues, or want to stop by for an informal visit, let us know. Talk to your assigned Inspector, or call A/W SPM David Karalunas at (907) 474-0276. Remember that the Safety Program can provide a "confidential" ear if you have a sensitive situation to discuss.

IA Renewal Seminar Credit at Aviation North Expo

Aviation North Expo Maintenance Workshop will be on Thursday/Friday, October 6 & 7, 2005. We are still working on the acceptance; however, we do expect that the entire workshop program will again meet the requirements of 14 CFR 65.93(a)(4). A preliminary schedule is at the end of this newsletter. See www.AviationNorth.org for the latest information.

2005 Master Mechanic and Master Pilot Awards

The **Charles Taylor Awards** will be presented on Saturday, October 8, at the Aviation North Expo banquet. Our recipient this year will be **Richard "Sarge" Cross**, long-time Frontier and Warbelow's mechanic. The banquet speaker is Brent Taylor, Executive Director of the Antique Airplane Association. A separate Wright Brothers Awards banquet is in the works for mid-November, with at least three recipients currently on the list. Please nominate eligible folks for future awards at any time.

Upcoming A/W Safety Meetings

Yes, we know that September 1 was about the worst day to have an **External Loads** meeting (we didn't pick the date), but we still had a great turnout. We will cover it again at **Aviation North Expo**,

tentatively at 4 PM on Saturday, October 8. We expect a Notice of Proposed Rulemaking (NPRM) to be released after the final national policy is drafted, to give the public another input opportunity. After Aviation North Expo, the SPMs will likely be focusing on a new statewide plan for the next year, so we don't want to promise anything yet. Your best bet is to keep your SPANS account up to date with your chosen notification preferences at www.faasafety.gov. If you have any questions about how to set up your account or configure your preferences, just call David Karalunas.

Inspectors

The "usual suspects," your Fairbanks Airworthiness Inspectors:

Airworthiness Unit Supervisor: James H. Tupper **Avionics: Airworthiness**

Airworthiness Charles "Chuck" Banks Blayne C. Camp Hardy "Mark" Smith Roderick L. "Rod" Beaman John Q. Gamble Kenneth C. Thomas Joseph T. "JT" Walsh George W. Earp Harley A. Holt

William "Bill" Mahaffey Patrick E. "Rick" Hrubes **Airworthiness Safety Program Manager**

John S. Sims Eric L. Jones David Karalunas

> Steve Ketzer, Jr. Alaskan Region System Safety Analysis Branch

David Maranville Cary J. Meier

You can reach them by phone at (907) 474-0276, or E-mail using the format: first name.middle initial.last name@faa.gov. No spaces, no caps. Call them if you have a question or problem. They are here to help!

In Closing

Only YOU can prevent...forest fires (again!)? Well, we did better than last year, but we can't stop lightning! Aircraft accidents aren't random uncontrollable events, though. They almost always involve a number of factors, any one of which could change the outcome if prevented or altered. That's where you come in. Pilots have trained for years on Cockpit Resource Management (CRM). That term has evolved to "Crew," not just "Cockpit." We are all part of that crew. NASCAR has its Pit Crews, and you folks are just as important for success in aviation - more important, because many passengers' lives can depend on what you do. And "Crew" doesn't stop with you - it includes your coworkers, manufacturer's tech reps, and even we FSDO Inspectors who have had many years of experience doing what you are still doing every day. We've "been there, done that, got the T-shirt." We like to help answer questions before they become problems. Take advantage of that! "Manage" all of your available "Crew Resources" to do the best possible job that you can as aviation maintenance professionals. Lives do depend on it.

Since it is impossible for us to reach all A&Ps in our District, when you have finished reading this Newsletter, please pass it on to your A&P buddies and/or other aviation professionals.

'Til Next Time...

Keep 'em Flying - Safely!

Aviation North Expo Maintenance Workshop

Experts from Industry and government are once again converging on Fairbanks for the Maintenance Workshop at Aviation North Expo, October 6th and 7th at the Fairbanks Princess Riverside Lodge. This year Marvin Nuss from the FAA Small Aircraft Directorate in Kansas City, MO will be a featured speaker to address aging aircraft issues. This year's topics will also include corrosion detection and prevention, updates on the field approval process, as well as maintenance and troubleshooting of engines, ignition systems heaters and much more.

2005



Marvin Nuss

Registration in the workshop includes any session at Aviation North Expo on Thursday and Friday, as well as lunch both days and a ticket to the Exhibitor Reception on Thursday evening. For information go to www.aviationnorth.org or call 479 -9500. Note: The workshop is approved for training credit toward IA Renewal. Medallion member companies are eligible for a discount to this workshop.

Thursday, October 6 Preliminary Schedule

7:45am	Introduction and Welcome			
8 am	Maintenance & Troubleshooting for Piston		Janitrol Heater Maintenance & Troubleshooting	
	Ignition Products Jaime Valderrama, Unison		Randy Knuteson, Kelly Aerospace	
9 am	PT6 Troubleshooting, Ground Operations and Maintenance Chris Church, Standard Aero		TCM Engines, Troubleshooting & Maintenance	
			with FADEC Cory Thompson, TCM	
10 am			Spark plug theory & Maintenance	
	chute Recovery Systems Gregg Ellsworth, BPS		Dick Johnson, Champion	
11 am	TCM Ignition Systems Maintenance &		Pneumatic System Maintenance	
	Troubleshooting Cory Thompson, TCM		John Herman, Tempest	
Noon	Lunch			
1 pm	Aircraft Fuel & Oils Tom Stephens and	Igniter Plug Maintenance		
	Kimberly Morrison, Chevron Dick Johnson, Champio			
2 pm	Battery Theory & Maintenance	Composite Inspection & Damage Evaluation		
	Art Pierce, Concord Battery	Dave Swartz, FAA ACO		
3 pm	Aviation Greases	On-line 337s		
	Ed Barnes, Exxon-Mobil	Robert Christensen and Mark Wilson, FAA Flight Standards		
4 pm	Cleveland Wheels & Brakes	Update on Field Approvals Structural Repair Manuals		
	Rodger Dickson, Parker	Robert Christensen and Mark Wilson, FAA Flight Standards		
5 pm	Exhibitor Reception and ANE Trade Show Opening			

Friday, October 7 Preliminary Schedule

October / Preliminary Schedule		
General Session: Light Sport Aircraft: Today, Tomorrow and Beyond		
Keynote Speaker, Gregg Ellsworth, Ballistic Recovery Systems, St. Paul, MN		
What You Should Know About Aging Aircraft		
Marv Nuss, NASA/FAA Small Aircraft Directorate		
Product Demo or short presentation - TBA		
Aging Aircraft in the GA Fleet: Future of GA Maintenance		
Marv Nuss, NASA/FAA Small Aircraft Directorate		
Lunch		
Corrosion Issues for Alaska		
Dave Swartz, FAA ACO		
Product Demo or short presentation - TBA		
Corrosion Detection and Prevention		
Dave Swartz, FAA ACO		
Product Demo or short presentation - TBA		
Light Sport Update: Where do we go from here?		
Dan Billman & Tom Eldridge FAA Flight Standards		
Open House - Alaska Aerofuel Corporate Aviation Facility		
·		